

What is claimed is:

- 1 1. A method for setting opto-sensor detection sensitivity in a projection video  
2 display comprising the steps of:
  - 3 a) sequentially generating video signals of different colors for  
4 illuminating a sensor with video images of said video signals;
  - 5 b) automatically selecting respective detection thresholds responsive to  
6 said video signals;
  - 7 c) sequentially detecting sensor signals in excess of said respective  
8 detection thresholds; and,
  - 9 d) coupling said detected sensor signals for automated adjustment of said  
10 projection video display.
- 1 2. The method of claim 1, wherein said selecting step comprises activating for  
2 each said video signal a specific threshold value for detecting sensor signals.
- 1 3. The method of claim 1, wherein said selecting step comprises processing each  
2 said video signal to select a color specific detection threshold value.
- 1 4. The method of claim 2, wherein said activating step comprises selecting a  
2 detection threshold for a third color during an absence of said two color video signals.
- 1 5. The method of claim 2 wherein said selecting step comprises sustaining said  
2 selected threshold value for a time interval following cessation of said generating  
3 step.

- 1 6. A video amplifier for a display device, comprising:  
2 first and second transistors configured as a cascode amplifier coupled to said  
3 display device and responsive to a video signal;  
4 a time constant network coupled to said first and second transistors for  
5 developing a control voltage responsive to said video signal; and  
6 a third transistor responsive to said control voltage and being switched between  
7 conduction and non-conduction responsive to a presence and absence of said video  
8 signal.
- 1 7. The video amplifier of claim 6, wherein said third transistor is conductive when  
2 said video signal is present in said cascode amplifier.  
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- 1 8. The video amplifier of claim 6, wherein said third transistor remains conductive  
2 during a predetermined interval upon cessation of said video signal in said cascode  
3 amplifier.
- 1 9. The video amplifier of claim 6, wherein said time constant network has  
2 different charging and discharging times.
- 1 10. The video amplifier of claim 6, wherein said third transistor generates a  
2 predetermined constant current responsive to said video signal presence.

1 11. A projection display device with automated adjustment using at least one photo  
2 sensor, comprising:

3 a source of video signal generating an image for illuminating said photo-  
4 sensor and forming a sensor signal;

5 a detector coupled to said sensor and generating an output signal responsive  
6 to said sensor signal shaving a certain signal value; and,

7 a threshold generator responsive to said video signal for setting a detection  
8 threshold for said detector,

9 wherein, said detector generates an output signal for said automated  
10 adjustment when said sensor signal value exceeds said detection threshold  
11 generated responsive to said video signal, and absent said video signal said  
12 threshold generator assumes a second detection threshold in accordance with a  
13 second video signal.

1 12. The projection display device of claim 11, wherein said video signal coupled for  
2 automated alignment represents a specific colored image.

1 13. The projection display device of claim 11, wherein said threshold signal value  
2 enables detection of said photo sensor signal when illuminated by a colored image  
3 formed by said video signal.

1 14. The projection display device of claim 11, wherein said video signal forming  
2 said image for illuminating said photo-sensor represents a marker block positioned  
3 within a raster to illuminate a sensor when projected.